



PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

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[Signature]

In re application of

Docket No: Q61622

Vojin JEREMIJEVIC

Appln. No.: 09/674,643

Group Art Unit: 3763

Confirmation No.: 8866

Examiner: MARINO, Roz

Filed: November 02, 2000

For: DEVICE FOR PROTECTING AND NEUTRALIZING A NEEDLE FOR MEDICAL USE

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS

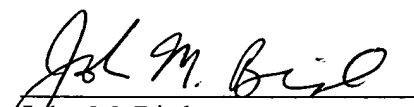
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$250.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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I. REAL PARTY IN INTEREST

The real party in interest is DEVICE RESEARCH AND DEVELOPMENT (DRD)
(Assignee) by virtue of an assignment executed by the inventor (Appellant) on October 2, 2000,
and recorded by the Assignments Branch of the U.S. Patent and Trademark Office on November
2, 2000 at Reel 012344, Frame 0088.

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II. RELATED APPEALS AND INTERFERENCES

Upon information and belief, there are no other prior or pending appeals, interferences, or judicial proceedings known to Appellant, Appellant's representative or the assignee that may be related to, be directly affected by, or have a bearing on the Board of Patent Appeal's and Interference's (Board) decision on this appeal.

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III. STATUS OF CLAIMS

Claims 1-3 and 15-36 are all of the pending claims. Claims 1-3 and 23-36 stand rejected.

Claims 15-22 are allowed. The rejection of claims 1-3 and 23-36 is appealed.

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IV. STATUS OF AMENDMENTS

An Amendment under 37 C.F.R. 1.116 was filed on January 7, 2004, in Response to the Final Office Action dated November 28, 2003. As noted in the Advisory Action dated February 2, 2004, the Amendment filed January 7, 2004, will be entered.

A Supplemental Amendment under 37 C.F.R. 1.116 was filed on February 24, 2004. As indicated in the Advisory Action dated April 23, 2004, the Supplemental Amendment filed on February 24, 2004, will not be entered.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

A *non-limiting* embodiment of the invention is described below with references to the present specification. The device for protecting a needle is used to protect a health care worker from the sharp end 2 of a needle 1 when the needle 1 is not being used, and allows a sleeve 10 to be moved away from the sharp end 2 when the needle is being used. *See Fig. 1.*

A first link 13 is able to take at least three positions when the needle is positioned vertically upright with the sharp end 2 of the needle 1 above a base end 3 of the needle 1: two equilibrium positions I, II and a locked position III. *See Fig. 1.* The two equilibrium positions are an equilibrium starting position I and an equilibrium in-use position II. A first resilient hinge means 19 connects a first end 15 of the first link 13 to the sleeve. The resiliency of the first resilient hinge means allows the first link 13 to take up either an equilibrium in-use position II or an equilibrium starting position I when no force is applied to the link and the needle is positioned upright. In these equilibrium positions I, II, the link 13 makes an acute angle with respect to an axis of a through bore 11 of the sleeve 10. *See Fig. 1.*

A first crank arm 22, which has a length no greater than a length of the first link 13, is mounted so that its first end 24 pivots freely with a second end 17 of the first link 13 and its second end 26 pivots freely with a base means 21, which receives the base end 3 of the needle 1.

The device can also include a second link 14 connected to the sleeve 10, and a second resilient return hinge means 20 that connects a first end 16 of the second link to the sleeve 10 so that the second link 14 takes up a defined equilibrium position on a direction that makes an acute angle with the axis of the bore 11. *See Figs. 2-5.* A second crank arm 23, which has a length no

greater than a length of the second link 14, is mounted so that its first end 25 pivots freely with a second end 18 of the second link 14 and its second end 27 pivots freely with the base means 21.

The use of two links and two crank arms allows a health care worker to apply one finger on each of the crank arms when adjusting the device.

Means-plus-function Limitations

Independent claim 1 and dependent claim 3 include the mean-plus-function limitations “first means for mounting each of said first and second ends of the first crank arm to pivot freely respectively on the second end of the first link and on the base means” and “second means for mounting each of said first and second ends of the second crank arm to pivot freely respectively on the second end of the second link and on the base means,” respectively.

The corresponding structures in the specification with respect to these limitations are the freely pivoting elements 28, 29, 30, 31 of the embodiment shown in Figs. 1-6 and the freely pivoting elements 128, 129, 130, 131 of the embodiment shown in Fig 7. These elements allow for free pivoting of the crank arms 22, 23, 122, 123. These free pivoting elements contrast with the *non-limiting* embodiments of the resilient return hinge means 19, 20, 119, 120, which do not allow free pivoting, but instead are designed to take equilibrium positions.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-3 and 23-36 are rejected under 35 U.S.C. 102(e) as allegedly being anticipated
by Nestell (US 5,925,020).

VII. ARGUMENT

As noted above, claims 1-3 and 23-36 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Nestell. It is respectfully submitted that claims 1-3 and 23-36 are patentable over Nestel for the following reasons.

Claims 1-2, 23-25, 28-31, and 36 are Patentable Over Nestel

Independent claim 1 recites a device for protecting a needle having *inter alia* a first link able to take at least three positions when the needle is positioned vertically upright with the sharp end of the needle above the base end of the needle, the three positions being an equilibrium starting position, an equilibrium in use position, and a locked position; a first resilient return hinge means for connecting the first end of the first link to the sleeve, and a first crank arm. The resiliency of the first hinge means allowing said first link to takes up one of the equilibrium in use position and the equilibrium starting position, wherein the link makes an acute angle (α) with respect to the axis of the through bore, when no force is applied to the link, and the needle is positioned vertically upright with the sharp end of the needle above the base end of the needle.

Nestell discloses a needle point barrier 10 having a link arm 38 and a hinge 46 that connects the link 38 to barrier arm 44. The barrier arm 44 is connected to a tip guard 50. The link arm 38 includes a longitudinally extending slot 42 through which the needle cannula 12 extends. A hinge 40 connects the link arm 38 to a spring arm 32. The proximal end 34 of the spring arm 32 is joined to a needle hub 18. *See* Nestell at Figs. 1-5.

Figs. 1 and 2 of Nestell show the needle point barrier 10 in a ready-to-use position. Fig. 3 shows a position of Nestell's link arm 38 past which the biasing forces exerted by the spring arm 32 propel the barrier arm 32 in the direction C to the position shown in Fig. 5. Prior to the position in Fig. 3, the biasing forces of the spring arm 32 exert a force in the direction opposite the direction C, i.e., towards the position in Figs. 1 and 2. *See Nestell at 4:27-61.*

Nestell's structure, in which the needle point barrier 10 includes two links (barrier arm 44 and link 38) provides Nestell's needle point barrier with a complicated structure. Furthermore, this structure creates a twisting force when two links 44 and 38 pass from the position of Fig. 1 to the position of Fig. 5. Therefore, there is a risk that the needle 12 will twist or break if the needle is very thin, causing a danger to any health care worker who handles the needle.

Appellant sees no interpretation of Nestell's needle point barrier that meets all of the claim's recitations. As an initial matter, the connection between Nestell's barrier arm 44 and tip guard 50 cannot be considered the recited "first resilient return hinge means" because the connection between the barrier arm 44 and tip guard 50 is not a *resilient* hinge, but is instead a non-movable connection. Accordingly, it appears to be the Examiner's position that Nestell's link arm 38 corresponds to the recited "first link," that the hinge 46 corresponds to the recited "first resilient return hinge means," that the spring arm 32 corresponds to the recited "first crank arm."

However, Nestell's link 32 cannot reasonably correspond to the claimed "first link" because the link 32 is not able to take at least three positions (an equilibrium starting position, an equilibrium in use position, and a locked position) when no force is applied to the link 32.

Instead, the link 32 assumes either the position shown in Fig. 1 or the position shown in Fig. 5. *See Nestell at 4:37-61.* The embodiment of Figs. 1-5 of Nestell has a non-locking tip in which it is impossible to know if the needle has or has not been utilized. Therefore the needle is always dangerous to the ill patient. Although Figs. 6 and 7 appear to show an alternative embodiment in which the equilibrium position shown in Fig. 5 is a locked position, this is not an additional position, but is the same position as one of the two equilibrium positions.

In addition, the connection between the proximal end 34 of the spring arm 32 and the mounting collar 30 cannot be considered a “first means for mounting each of said first and second ends of the first crank arm to pivot freely respectively on the second end of the first link and on the base means.” The connection between the proximal end 34 of the spring arm 32 and the mounting collar 30 is provided as a *non-movable* connection. *Compare* Nestell’s Figs. 2 & 5 with Fig. 3. The fact that this connection is non-movable allows the spring arm 32 to become deflected so that the spring arm 32 can provide a biasing force in order to return to flat position of either Fig. 2 or Fig. 5.

Accordingly, it is respectfully submitted that independent claim 1 is patentable, and that dependent claims 23-25, 28-31, and 36 are patentable at least because of their dependency from claim 1.

Claims 3, 26, 27, and 32-35 are Patentable Over Nestel

It is respectfully submitted that claim 3 is patentable over Nestel at least because of its dependency from claim 1 and for the following reasons.

Dependent claim 3 recites a device for protecting a needle having *inter alia* a first link able to take at least three positions when the needle is positioned vertically upright with the sharp end of the needle above the base end of the needle, a second link; first and second resilient return hinge means, and a first and second crank arm. The fact that the claimed invention includes two links, hinges, and crank arms allows a health care worker to apply one finger on each of the crank arms when adjusting the device.

Even assuming *arguendo* that the two portions of Nestell's link arm 38 located on either side of the slot 42 correspond to the recited first and second link arms, Nestell's needle point barrier cannot include both first and second crank arms. One a single spring arm 32 is disclosed. See Nestell at, e.g., Fig. 4.

Moreover, Nestell's needle point barrier does not have any structure that could be reasonably modified to have a second link; a second resilient return hinge means, and a second crank arm. It would be impossible to have two links 38 each having a slot 42 because the link 38 is structured so that it crosses the needle 12.

It is respectfully submitted that dependent claims 26, 27, and 32-35 are patentable at least because of their dependency from claims 1 and 3.

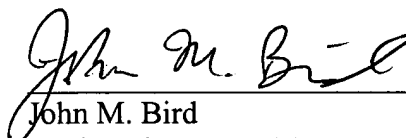
Conclusion

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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CUSTOMER NUMBER

Date: December 27, 2004

CLAIMS APPENDIX

CLAIMS 1-3 and 23-36 ON APPEAL:

1. A device for protecting a needle for medical use or the like, the needle having a sharp end and a base end, comprising:

a sleeve having a through bore defined on a given axis, said through bore being of a section that is not less than that of the needle to be protected;

a first link having first and second ends, said link being of a length " L_1 " defined between said two ends, wherein the first link is able to take at least three positions when the needle is positioned vertically upright with the sharp end of the needle above the base end of the needle, the three positions being an equilibrium starting position, an equilibrium in use position, and a locked position;

a first resilient return hinge means for connecting the first end of the first link to the sleeve, the resiliency of said first hinge means allowing said first link to takes up one of the equilibrium in use position and the equilibrium starting position, wherein the link makes an acute angle (α) with respect to the axis of the through bore, when no force is applied to the link, and the needle is positioned vertically upright with the sharp end of the needle above the base end of the needle;

a base means suitable for receiving the base end of the needle to be protected;

a first crank arm, said first crank arm being defined between first and second ends, said crank arm being of a length " I_1 " defined between its two ends, the length " I_1 " of the first crank arm being no greater than the length " L_1 " of the first link; and

first means for mounting each of said first and second ends of the first crank arm to pivot freely respectively on the second end of the first link and on the base means.

2. A device according to claim 1, further including strut means connecting said link to said crank arm when they are in a first position, said strut means including a weak point making it possible, on application of a given force, to break said strut means at said weak point.

3. A device according to claim 1, further including:

a second link having first and second ends, said second link being of a length " L_2 " defined between said two ends;

second resilient return hinge means for connecting the first end of the second link to the sleeve, said second hinge means being organized so that said second link takes up a defined equilibrium position on a direction that makes an acute angle (α') with the axis of the through bore;

a second crank arm, said second crank arm being defined between first and second ends, said second crank arm being of a length " I_2 " defined between its two ends, the length " I_2 " of the second crank arm being no greater than the length " L_2 " of the second link; and

second means for mounting each of said first and second ends of the second crank arm to pivot freely respectively on the second end of the second link and on the base means.

23 . A device according to claim 1, wherein the base means comprises two first and second rings, the first ring receiving the base end of the needle, and means for connecting said two rings between them by weak points.

24. A device according to claim 23, wherein the two rings respectively include two openings, the two openings being realized to form, when the two rings are connected between them, a female part of a male-female jointing able to cooperate with the complementary male part constituted by an end-part of a syringe, the total depth of these two openings, when the two rings are connected between them, being lower than the height of the end-part of the syringe.

25. A device according to claim 23, further including a not-withdrawal ring located on a wall of said second ring.

26. A device according to claim 3, wherein the lengths “ L_1 ” and “ L_2 ” are substantially equal to common value “ L ” and that the lengths “ I_1 ” and “ I_2 ” are substantially equal to a common value “ T ”.

27. A device according to claim 3, wherein the first and second links and the first and second crank arms are situated substantially in a common plane and form substantially a quadrilateral whose diagonals are substantially perpendicular, the diagonal interconnecting the vertices of the quadrilateral situated respectively at the sleeve and at the base means coinciding substantially with the axis of the through bore.

28. A device according to claim 1, wherein at least two of the following elements are made of the same material: sleeve; base means; link; crank arm; hinge means; and freely pivoting mounting means.

29. A device according to claim 28, wherein said at least two elements are made by molding.

30. A device according to claim 29, wherein the material is a plastics material.

31. A device according to claim 1, wherein the length " L_1 " of the link and the length " I_1 " of the crank arm are determined in such a manner than the sum $L_1 + I_1$ and the sum $L_1 + I_1 + M_1$, where " M " represents the length of the sleeve, bracket the length " A " of the needle to be protected as measured between the sharp end and the base end.

32. A device according to claim 3, further including a casing made of a resilient material surrounding under tension the assembly constituted by the sleeve, the first and second links, the first and second hinge means, the first and second crank arms, the first and second means for mounting the first and second ends of the first and second crank arms to pivot respectively on the second ends of the first and second links and on the base means, and at least a portion of the base means.

33. A device according to claim 32, wherein the resilient material from which the casing is made is transparent.

34. A device according to claim 32, further including a sachet made of a non-stretch material, the sachet containing a given substance and being capable of tearing under a given traction, and means for securing the sachet and the casing substantially at two opposite points of the inside wall of the casing, the two said points being situated substantially facing the first means for mounting the first ends of the first and second crank arms to pivot freely on the second ends of the first and second links.

35. A device according to claim 34, wherein the substance contained in the sachet presents at least one of the following properties: being suitable for absorbing at least a portion of visible light, being suitable for hardening, being suitable for sterilizing.

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36. A device according to claim 1, further including, for neutralizing said needle, snap-fastening means to lock said link and said crank arm relative to each other in a second given position.

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EVIDENCE APPENDIX:

None

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RELATED PROCEEDINGS APPENDIX

None